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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,842	08/07/2001	Junichi Yamanouchi	003510-106	8656

7590 11/14/2003

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EXAMINER

SHOSHO, CALLIE E

ART UNIT PAPER NUMBER

1714

DATE MAILED: 11/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/922,842

Applicant(s)

YAMANOUCHI ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-27, 30-39 and 46-52 is/are rejected.
- 7) ☒ Claim(s) 28, 29 and 40-45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. All outstanding rejections of record are overcome by applicants' amendment filed 8/28/03.

The following action is non-final in light of the new use of a reference against the present claims, namely, Mizukawa et al. (2002/0017217).

Further, it is noted, as pointed to by applicants, that the PTO-892 attached to the office action mailed 2/28/03 incorrectly cites the patent number of Kabalnov as U.S. 6,432,094 while the correct patent number is U.S. 6,342,094. The incorrect citation has been stricken from the PTO-892 of 2/28/03 (copy of which is attached to the present office action) and a new PTO-892 attached to the present office action correctly cited the Kabalnov reference.

**Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 25-27, 30-39, and 46-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Mizukawa et al. (U.S. 2002/0017217).

Mizukawa et al. disclose method for producing ink wherein the method comprises first step of preparing dye solution having oil-soluble dye dissolved in organic solvent and then

mixing this dye solution with water to prepare dispersion of the dye particulates, second step of preparing an oil-soluble polymer solution having the oil-soluble polymer dissolved in an organic solvent and then mixing the oil-soluble polymer solution with water to prepare dispersion of the oil-soluble polymer particulates, and third step of mixing the dispersion of dye particulates with the dispersion of oil-soluble polymer particulates to prepare coloring particulates which are present in the ink in amount of 1-45%. It is disclosed that the organic solvent in which the dye is dissolved includes hydrophobic high boiling point solvent identical to that presently claimed. The coloring particulates comprise 100 parts oil-soluble dye, 50-600 parts oil-soluble polymer, and 10-400 parts high boiling point solvent from which it is calculated that the coloring particulates comprise approximately 9-62% oil-soluble dye, 9-85% oil-soluble polymer, and 14-73% high boiling point solvent. The coloring particulates have average particle size less than 100 nm. The oil-soluble dye is identical to that disclosed in present claims 27 and 39. The oil-soluble polymer includes ionic-group containing vinyl polymer or condensed polymer such as polyurethane, polyester, polyamide, polyurea, and polycarbonate wherein the ionic group comprises carboxyl group and sulfonic acid group and is present in amount of 0.1-3 mmol/g polymer. The oil-soluble polymer possesses molecular weight of 1,000-200,000. There is also disclosed an ink jet recording method wherein the above ink is subsequently printed onto substrate comprising image receiving layer that contains porous pigment (paragraphs 2, 26-30, 57, 90-92, 135, 137, 201, 215, 218, 222, 236-237, 239-245, 294, 300, 313, 341, 351, and 337).

Given that the ink comprises 1-45% coloring particulates and given that the coloring particulates comprise 9-62% oil-soluble dye, 9-85% oil-soluble polymer, and 14-73% high

boiling point solvent, it is calculated that the ink comprises approximately 0.09-28% oil-soluble dye, 0.09-38% oil-soluble polymer, and 1.4-33% high boiling point solvent.

In light of the above, it is clear that Mizukawa et al. anticipate the present claims.

**NOTE:** Mizukawa et al. is applied against the present claims under 35 USC 102(e). The filing date of Mizukawa et al. lies between the filing date, i.e. 8/7/01, and the foreign priority date, i.e. 8/7/00, of the present application. Under MPEP 706.02(b), rejections based on 35 U.S.C. 102(c) can be overcome by perfecting the filing date of the priority document. Applicants have submitted certified copy of the foreign priority document on 10/31/01.

If applicants were to submit English language translation of the foreign priority document, i.e. JP 2000-2387817, such submission would result in the perfection of the foreign priority filing date and thus, the removal of the rejection of record as set forth in paragraph 3 above.

**Allowable Subject Matter**

4. Claims 28-29 and 40-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 28-29 and 40-45 would be allowable if rewritten in independent form as described above given that there is no disclosure or suggestion in the "closest" prior art, namely, Mizukawa et al. (U.S. 2002/0017217), of oil-soluble dye as set forth in presently claimed formula M-I (claims 28 and 43-44), presently claimed formula C-I (claims 29 and 45), presently

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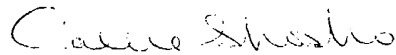
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claimed formula II (claim 40), presently claimed formula III (claim 41), or presently claimed formula IV-1 to IV-4 (claim 42).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
11/8/03